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R E M A R K S

Claims 1-4, 8, 16-19 and 21 have been amended. Claims 5-7, 9-15, 20 and 22-25 stand as previously presented.

Claims 1-25 were considered in the Office Action.

5 Claim 16 stands rejected under 35 U.S.C. 112, 2nd paragraph, as being indefinite. Claims 1, 4, 5, 7 and 13 stand rejected under 35 U.S.C. 102(b) as being anticipated by Miyadera et al., U.S. Patent 4,769,770 (hereinafter Miyadera).
10 Claims 2, 3, 14, 23 and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miyadera in view of On et al., U.S. Patent 6,275,956 (hereinafter On). Claims 6, 16 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miyadera in view of Sites, U.S. Patent 5,652,889. Claims
15 8-12 and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miyadera in view of Canady et al., U.S. Patent 5,742,828 (hereinafter Canady). Claim 15 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Miyadera in view of Srivastava et al., U.S. Patent 5,963,740 (hereinafter Srivastava). Claims 18-22 stand rejected under
20 35 U.S.C. 103(a) as being unpatentable over Miyadera in view of Sites and further in view of Canady.

The Invention of Claim 1

The cited references do not disclose or suggest:

25 "A method of **selecting a symbol table**, comprising:
providing a plurality of symbol tables in a computer system, said computer system having an address pointer, each of said symbol tables encompassing a range of addresses; and
selecting at least one of said plurality of symbol tables

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within whose range of addresses said address pointer is pointing."

(Claim 1, as amended, emphasis added)

5 The above highlighted features which differentiate the present invention from the cited references are features that are not anticipated by the cited references and would not have been obvious to a person with ordinary skill in the art having the cited reference. The disclosure of Miyadera is not directed at the selection of a symbol table, but at the
10 relocation of a logical address to form a real address. Although Miyadera does disclose a table (relocation table), this is **not** a symbol table. The term symbol table and the use of a symbol table is defined in Applicants' specification at page 2, lines 26-32, as follows:

15 "Debugging tools correlate high level instruction lines, variables, functions, etc, with their machine language counterparts through symbol tables. A symbol table is basically a lookup table containing the addresses in the computer's memory corresponding to each line of high
20 level code, each variable, each function entry point, etc."

Miyadera does not disclose a method of selecting a symbol table, but a method of altering a portion of a logical address to form a real address using a relocation table, thereby
25 avoiding the need for a segment/page tables and translation look-aside buffers. (See Miyadera, Background)

The cited references, taken singly or in combination, do not disclose or suggest each and every limitation of claim 1. For at least the reasons discussed above, the Applicants
30 believe that claim 1 is allowable over the cited references and respectfully request reconsideration.

Dependent claims 2-15 ultimately depend upon independent

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claim 1 which is allowable over the cited art as discussed above. These dependent claims are likewise in condition for allowance at least because they depend on an allowable independent claim. However, dependent claims 2-15 are
5 independently allowable at least in that they recite particular features which, when combined with the elements of the independent claim, are not disclosed or suggested in the cited references.

The Invention of Claim 16

10 The cited references do not disclose or suggest:

"An apparatus for **automatically selecting a symbol table** in a computer having a program counter and a plurality of symbol tables, the apparatus comprising:

a) at least one computer readable storage medium; and

15 b) computer readable program code stored on the at least one computer readable storage medium, the computer readable program code comprising code for **selecting one of said plurality of symbol tables wherein said program counter in said computer contains an address within said one of said**
20 **plurality of symbol tables."**

(Claim 16, as amended, emphasis added)

Applicants repeat the arguments for allowability set forth above with respect to claim 1, but specifically directed to the apparatus set forth in claim 16. Again, the claimed
25 invention is not an address relocation system, as discussed by the Examiner, but a symbol table selector. The problem being solved is not to alter a logical address to form a real address, but to select an appropriate symbol table. Therefore, although Sites does disclose a program counter,

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neither cited reference discloses the selection of a symbol table by determining whether a program counter contains an address within one of a plurality of symbol tables.

Dependent claims 17-22 ultimately depend upon independent claim 16 which is allowable over the cited art as discussed above. These dependent claims are likewise in condition for allowance at least because they depend on an allowable independent claim. However, dependent claims 17-22 are independently allowable at least in that they recite particular features which, when combined with the elements of the independent claim, are not disclosed or suggested in the cited references.

The Invention of Claim 23

The cited references do not disclose or suggest:

"A debugging apparatus, comprising:

a computer having a plurality of symbol tables stored thereon;

a debugger connected to said computer; and
automatic symbol table selection means for

automatically selecting at least one of said plurality of symbol tables in said computer for said debugger."

(Claim 23, emphasis added)

Applicants repeat the arguments for allowability set forth above with respect to claim 1, but specifically directed to the apparatus set forth in claim 23. Again, the claimed invention is not an address relocation system, as discussed by the Examiner, but a symbol table selector. The problem being solved is not to alter a logical address to form a real address, but to select an appropriate symbol table. Miyadera

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does not disclose an automatic symbol table selection means, nor do the other cited references. Therefore, even when combined, the cited references do not disclose or suggest each and every limitation of claim 23.

5 Furthermore, although On discloses a parallel debugger for MPI or multithreaded parallel programs, the environment disclosed in On does not require accessing symbol tables at memory locations different than expected when linking. There is therefore no motivation to combine On with another
10 reference for selecting an appropriate symbol table.

Dependent claim 24 depends upon independent claim 23 which is allowable over the cited art as discussed above. This dependent claim is likewise in condition for allowance at least because it depends on an allowable independent claim.

15 However, dependent claim 24 is independently allowable at least in that it recites particular features which, when combined with the elements of the independent claim, are not disclosed or suggested in the cited references.

The Invention of Claim 25

20 The cited references do not disclose or suggest:

"An apparatus for automatically selecting a symbol table in a computer having a plurality of processing cells and having a plurality of symbol tables stored thereon, each of said plurality of symbol tables having a cell
25 identification to indicate for which of said plurality of processing cells it is intended, the apparatus comprising:

- a) at least one computer readable storage medium; and
- b) computer readable program code stored on said at

30 least one computer readable storage medium, the computer

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readable program code comprising code for selecting at least one symbol table which is intended for use with the processing cell which is executing said computer readable program code."

(Claim 25, emphasis added)

5 Applicants repeat the arguments for allowability set forth above with respect to claim 1, but specifically directed to the apparatus set forth in claim 25. Again, none of the references disclose the automatic selection of a symbol table. None of the references disclose a symbol table having a cell
10 identification. The rejection indicates that Canady discloses a symbol table having a cell identification (see paragraph 9, Office Action mailed September 16, 2003). Applicants respectfully but strongly disagree. Canady does not disclose a multi-celled computing environment. Canady does disclose
15 multiple symbol tables, but this is to separate global identifiers and local identifiers, and the multiple symbol tables do not contain cell identifications. (See col. 5, lines 56-63) Canady does not appear to disclose any method of selecting an appropriate symbol table, but rather, searches
20 all symbol tables "associated with the application libraries made available to it...". (Col. 6, lines 57-58) The identifier referred to in the rejection, discussed at col. 6, line 41 of Canady, is not a cell identifier, but appears to be a possible symbol. The cited portion of Canady is directed to
25 determining whether a portion of the source code is a symbol in any symbol table, rather than selecting an appropriate symbol table based on a cell identification in the symbol table. (See Canady, col. 6, lines 15-23, col. 6, lines 40-46) The cited references, taken singly or in combination,
30 therefore do not disclose or suggest each and every element of claim 25.

The Applicants believe that the currently pending claims

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are clear and definite and are not anticipated by or obvious over the cited references and respectfully request the timely issuance of a Notice of Allowance.

Dated: 12/4/03

Respectfully submitted,
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